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10/539,326	06/15/2005	Hendrik Van Houten	NL 021377	9278

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EXAMINER	
YODICHKAS, ANEETA	
ART UNIT	PAPER NUMBER
2627	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/539,326	VAN HOUTEN, HENDRIK	
	Examiner	Art Unit	
	Aneeta Yodichkas	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 February 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-19** are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,071,671 to *Glushko et al*.

As to **claim 1**, *Glushko* discloses an optical information storage unit comprising: an information layer (2) comprising a plurality of data areas (3), each data area being arranged to emit light when illuminated by light at a predetermined wavelength (Fig. 7, column 13, lines 47-58), where the information layer is data layer (2) and there are several data areas or elemental cells (3) that are illuminated when exposed; and a readout layer (9) separated from the information layer (A1-A3) so that the readout layer (9) and the information layer (A1-A3) are not in contact with each other, the readout layer (9) comprising a plurality of optical apertures, each optical aperture being arranged to image substantially only the near field of light emitted from a respective data area (Fig. 10-12, column 15, lines 26-30), where the readout layer is protective layer (9) and the information layer is fluorescent data layers (A1-A3), which is separated by non-fluorescent layers (B) and the protective layer (9) has several apertures as shown in Fig. 10.

As to **claim 2**, *Glushko* discloses the information storage unit, wherein both the readout layer (9) and the information layer (A) are planar and substantially parallel, the separation between the information layer (A) and the readout layer (9) being less than the wavelength of the emitted light (Fig. 12, column 15, lines 53-59, column 18, lines 30-34, 55-58), where the readout layer (9) and the information layer (A) are parallel and the wavelength used for the light is 0.5 μm and the thickness of B or the distance between the readout (9) and the information layers (A) is in the range of 0.3 mn-1 μm.

As to **claim 3**, *Glushko* discloses the information storage unit, wherein the information layer (A) is movable within a plane substantially parallel to the readout layer (9) (Fig. 12, column 15, lines 53-59), where there are several information layers (A) which is parallel to the readout layer (9) so data may be moved from one information layer to another.

As to **claim 4**, *Glushko* discloses the information storage unit, wherein said information layer (A) has a data areas (3) per unit area, and said readout layer (9) has b optical apertures per unit area, where a>b (Fig. 9-12, column 9, lines 59-61), where information layers (A) has data areas (3) and the readout layer (9) has apertures as shown.

As to **claim 5**, *Glushko* discloses the information storage unit, wherein each data area comprises an optical aperture, the light emitted from each data area when illuminated corresponding to light transmitted through the aperture (Fig. 7 and 10, column 15, lines 26-30), where the data areas are illuminated through the apertures as shown in the figures.

As to **claim 6**, *Glushko* discloses the information storage unit, wherein each data area comprises a reflector, the light emitted from each data area comprising light reflected from the reflector when the respective data area is illuminated (Fig. 18, column 16, lines 31-38), where each illuminate data areas reflect the fluorescent light and therefore has a reflector.

As to **claim 7**, *Glushko* discloses the information storage unit, wherein each area comprises a fluorescent material, the light emitted from each data area comprising the light emitted by the material as it fluoresces, the illuminating light acting to excite the fluorescent material (Fig. 18, column 16, lines 31-38), where the disc is a fluorescent memory device and the light emitted is fluorescent when fluorescent light excites the disc.

As to **claim 8**, *Glushko* discloses the information storage unit, wherein an optically transmissive material is placed between the information layer and the readout layer, the optically transmissive material having a refractive index greater than 1 at the wavelength of the emitted light (Fig. 12, column 18, lines 24-30), where the transmissive material is layers (B) and the material used for it is polymethilmethacrylate, which has a refractive index greater than 1.

As to **claim 9**, *Glushko* discloses the optical information storage unit, wherein at least one of said data areas is modifiable by a predetermined process so as to alter the optical characteristics of the data area such that the intensity of light emitted by the data area when illuminated will be altered (Fig. 8, columns 13-14, lines 65-7), where the data

areas as shown in elemental cells 3, 3', 3'', and 3''' all have different concentrations of fluorescent isomeric forms which alters in intensity of light emitted.

As to **claim 10**, *Glushko* discloses the information storage unit, the unit comprising: a light source (11) arranged to provide light at the predetermined wavelength for illumination of the data areas (Fig. 18, column 16, lines 32-34); and an optical sensor (16) comprising a plurality of light sensing areas, the optical sensor being arranged to detect the near field of light imaged by each respective optical aperture (Fig. 18, column 16, lines 53-57), where the receiver (16) is the sensor.

As to **claim 11**, *Glushko* discloses a reader for an optical information storage unit, the reader being arranged to removably receive an optical information storage unit, the reader comprising: a light source (11) arranged to provide light at the predetermined wavelength for illumination of the data areas (Fig. 18, column 16, lines 32-34); and an optical sensor (16) comprising a plurality of light sensing areas, the optical sensor being arranged to detect the near field of light imaged by a respective optical aperture of the optical information storage unit (Fig. 18, column 16, lines 53-57), where the receiver (16) is the sensor.

As to **claim 12**, *Glushko* discloses the reader, comprising writing means (11) arranged to controllably alter the optical properties of the data areas, so as to write data to the data areas (Fig. 18, column 16, lines 31-34), where the writing means is the reading/writing radiation (11).

As to **claim 13**, *Glushko* discloses the reader, comprising movement means arranged to move the position of the information layer (A) relative to the position of both

the readout layer (9) and the optical sensor (16) (Fig. 18, column 16, lines 31-57), where the reader which comprises a light source (11) and optical sensor (16) and are adjusted based on the focusing of lens (15) and therefore the relative position of the information layer (A) to the readout layer (9) and sensor (16) are adjusted.

As to **claim 14**, *Glushko* discloses an information processing system comprising at least one of: an optical information storage unit (20) (Fig. 18, column 16, lines 40-43).

As to **claim 15**, *Glushko* discloses a method of reading information from an optical information storage unit, the information storage unit comprising: an information layer (2) comprising a plurality of data areas (3), each data area (3) being arranged to emit light when illuminated by the light at a predetermined wavelength (Fig. 7, column 13, lines 47-58), where the information layer is data layer (2) and there are several data areas or elemental cells (3) that are illuminated when exposed; and a readout layer (9) comprising a plurality of optical apertures, each optical aperture being arranged to image substantially only the near field of light emitted from a respective data area (Fig. 10-12, column 15, lines 26-31), where the readout layer is protective coating (9) and it has many apertures, wherein the method comprises the acts of: illuminating at least one data area with light at the predetermined wavelength (Fig. 18, column 16, lines 32-34), where light source (11) illuminates the data area; and detecting the optical intensity of light imaged by the respective optical aperture that corresponds to the illuminated data area (Fig. 3 and 18, columns 13-14, lines 65-7, column 16, lines 53-57), where Fig. 3 shows different light intensities and it is detected by receiver (16), wherein act of illuminating comprises an act of positioning the light such that the light does not pass

through the aperture prior to illuminating the data area (Fig. 18, column 16, lines 31-34), where the data areas are only illuminated when light is focused on the apertures.

As to **claim 16**, *Glushko* discloses the method of reading information from an optical information storage unit, the method further comprising the act of: moving the information layer (A) within a plane substantially parallel to the readout layer (9), such that an optical aperture previously imaging a first data area images a second, different data area within the information layer (Fig. 12 and 18, column 16, lines 31-34), where the information layer (A) is parallel to readout layer (9) and as the disc rotates a first data area is illuminated, then a second, and so forth.

As to **claim 17**, *Glushko* discloses a method of manufacturing an optical information storage unit, the method comprising the acts of: providing an information layer (2) comprising a plurality of data areas (3), each data area being arranged to emit light when illuminated by light at a predetermined wavelength (Fig. 7, column 13, lines 47-58), where the information layer is data layer (2) and there are several data areas or elemental cells (3) that are illuminated when exposed; and providing a readout layer (9) separated from the information layer (A1-A3) so that the readout layer (9) and the information layer (A1-A3) are not in contact with each other, the readout layer (9) comprising a plurality of optical apertures, the readout layer (9) being located at a distance from the information layer (A1-A3) such that each optical aperture is arranged to image substantially only the near field of light emitted from a respective data area (Fig. 10-12, column 15, lines 26-30), where the readout layer is protective layer (9) and the information layer is fluorescent data layers (A1-A3), which is separated by non-

fluorescent layers (B) and the protective layer (9) has several apertures as shown in Fig. 10.

As to **claim 18**, *Glushko* discloses a method of writing data to an optical information storage unit, the information storage unit comprising an information layer (A) comprising a plurality of data areas (3) (Fig. 9, column 9, lines 59-61), where the information layer (A) comprises data areas or elemental cells (3), each data area being modifiable so as to emit light when illuminated by light of a predetermined wavelength (Fig. 8, columns 13-14, lines 65-7), where the data areas or elemental cells (3, 3', 3", 3"') are modifiable based on amounts of fluorescent isomeric form, and a readout layer (9) comprising a plurality of optical apertures, each optical aperture being arranged to image substantially only the near field light emitted from the respective data area (Fig. 10-12, column 15, lines 26-31), where the readout layer is protective coating (9) and it has many apertures; the method comprising acts of: selectively modifying at least one data area so as to emit light at a predetermined intensity when illuminated, the predetermined intensity being indicative of the information stored by the respective data area (Fig. 8, columns 13-14, lines 65-7), where the data areas or elemental cells (3, 3', 3", 3"') are modifiable to have different light intensities, wherein act of selectively modifying comprises an act of positioning an illuminating light source such that light from the light source does not pass through the plurality of optical apertures prior to the illuminating the data areas (Fig. 18, column 16, lines 31-34), where the data areas are only illuminated when light is focused on the apertures.

As to **claim 19**, *Glushko* discloses a method of manufacturing a reader for an optical information storage unit, the method comprising acts of: providing a locator unit arranged to removably receive an optical information storage unit (20) (Fig. 18, column 10, lines 16-17), where the apparatus receives the optical storage unit (20); providing a light source (11) arranged to provide light at the predetermined wavelength for illumination of the data areas of the storage unit (Fig. 18, column 16, lines 32-34); and providing an optical sensor (16) comprising a plurality of light sensing areas, the optical sensor being arranged to detect the near field of light imaged by each respective optical aperture of the storage unit (Fig. 18, column 16, lines 53-57), where the receiver (16) is the sensor, wherein the act of providing the comprises an act of arranging the optical sensor (16) on a different side of the information storage unit than a side where light from the light source enters the information storage unit (Fig. 13, 14, and 18, column 15, lines 60-67, column 16, lines 31-34), where sensor or receiver (16) is placed on one side of the dual layer disc and is on a different side from where the light enters.

Response to Arguments

3. Applicant's arguments with respect to claims 1, 15, 17, 18 and 19 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aneeta Yodichkas whose telephone number is (571) 272-9773. The examiner can normally be reached on Monday-Thursday 8-5, Second Friday, 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (571) 272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jorge L Ortiz-Criado/
Primary Examiner, Art Unit 2627

/A.Y./
4/8/09